THE BED BUG

PREVENTION OF HOUSE INFESTATION

The Department of Health for Scotland has done well to issue a treatise on the bed bug written by Dr. William Gunn of the Public Health Department of Glasgow.[1] Lest it be thought that the work of Dr. Gunn is merely of academic interest, let it be said at once that the study was undertaken by him for public health purposes. Although the subject is not one of universal concern, it is nevertheless of importance to public health departments, particularly in connexion with slum clearance and the occupation of new houses by slum dwellers. The fact that many houses are occupied which are bug-infested does not redound to the credit of our civilization, and the practical problem which Dr. Gunn endeavours to solve is how to rid houses of bugs. It may appear at first glance that the solution of the trouble is merely a matter of housewifery, but Dr. Gunn explains that a knowledge of the life history and habits of the bed bug is essential for the conduct of a continual campaign against this pest.

It is interesting to observe that blood is the only food of the bug. It is a popular superstition that bugs feed only by night, but Dr. Gunn's observations show that they will attack their human victims even in bright sunshine. Bugs can live without food for a long period—as long as six months in some of Dr. Gunn's experiments. It might appear from this fact that if a house were left empty for a sufficiently long period all bugs would die, but to keep a house empty for a longer period than six months does not appear to be an economic solution of the difficulty.

A study of the general habits and breeding places of these insects was also undertaken. Their most favoured retreats are cracks in the walls or spaces behind wood near beds ; crevices around rusty nails in wooden structures ; the ends of mattresses which have not been disturbed for a while in bed-making ; the back of wallpaper ; within picture frames ; the under-surfaces of chair seats ; behind skirting boards and round the joints of iron bedsteads, especially if these are open or loosely fitting. Indeed, there appears to be no end to the type of shelter which bed bugs may select, but they are invariably places which are left undisturbed by cleansing operations. Such being the case it will be observed that in rehousing schemes it is necessary to insist on the cleanliness of places likely to be a retreat for bugs. This means that the housewife has to adopt for a while at least a higher standard and more caution with respect to cleanliness where there is fear of bug infestation than where no such fear exists.

Dr. Gunn shows that sulphur dioxide and hydrocyanic acid gas are poisonous to these insects as well as to the eggs if the gases are in concentrated doses, but he adds that it would be unsafe to guarantee disinfestation by the means of a single fumigation by gas, because some eggs, especially those well protected in crevices, are almost certain to escape destruction. For this reason it would appear necessary to fumigate again within two weeks. Hydrocyanic acid, however, is not advisable for use in connexion with bug infestation on account of its danger to human beings.

The prevention of bug infestation where slum dwellers are transferred to new houses is based on (1) the disinfestation of the articles which they transfer to the houses, and (2) the keeping clean of the new houses. The method adopted for the prevention of transference to new houses is outlined by Dr. Gunn. Every article to be transferred is thoroughly cleansed. Reliance is placed mainly on thorough scrubbing and cleansing of all articles with soap and hot water, with washing soda added, and not on the use of odorous disinfectants. A cheap disinfectant may be added in connexion with the use of the scrubbing brush, but this is merely added as an encouragement and to engender a sense of efficiency. The tenants are warned not to take with them to their new house infested articles of furniture or worthless pictures, and particularly not to embellish the new house with second-hand furniture. It is also insisted that in the new house care and supervision require to be continued, as it may happen that all bugs and eggs were not destroyed before the removal from the old house.

With regard to the disinfestation of the occupied house the principles are much the same. The process includes the dismantling and cleansing of infested pictures, the disinfection of all bedding by steam, the dismantling and thorough washing of bedsteads, the removal of picture rails and skirting boards and wallpaper, and the fumigation of the house by sulphur dioxide in the proportion of 20 fluid ounces of liquefied sulphur dioxide to 1,200 cubic feet of space. The use of the painter's blow-lamp where the woodwork or skirting boards have been removed is advised, and particularly scrubbing with warm water, soap, and washing soda. The importance of the structure of the house in relation to infestation is emphasized by Dr. Gunn. Papering the walls is to be discouraged. The wooden picture-rail and its bedding of wood in the wall should be abolished, and the skirting boards should be replaced by a skirting of cement. These structural improvements have greatly assisted disinfestation because the bug is easily observed and checked at a stage before serious spread can occur.

Dr. Gunn's paper is teeming with knowledge and should be in the hands of every medical officer of health and sanitary inspector, as well as in those of housing inspectors of local authorities and all who are responsible for the management of new housing estates. The correct attitude to the bug problem is that of prevention. Prevention can be secured if a system of inspection and supervision and help for the housewife is inaugurated before and after removal to new houses. In the words of Dr. Gunn, " The main duty "—that is, of keeping the house free from bugs and clean, " rests upon the occupants, but they must be guided and watched or assisted, and, if need be, prosecuted." They should be " taught not to rely on disinfectants, cheap or costly, to do their work for them ; and the virtues of methodical house-cleaning and of soap and water properly applied are given first place among the insect pest preventatives."

[1] *The Bed Bug (Cimex lectularius). Prevention of House Infestation.* A Study for Public Health Purposes. By William C. Gunn, M.D., D.P.H., senior assistant medical officer, Public Health Department, Glasgow. (H.M. Stationery Office. 1933. 9d. net.)

DANGEROUS DRUGS REGULATIONS

The Home Secretary gives notice that he proposes, after the expiration of forty days from November 3rd, 1933, to make Regulations under Section 7 of the Dangerous Drugs Act, 1920, and subsection (3) of Section 2 of the Dangerous Drugs Act, 1932, for controlling the manufacture, possession, and wholesale distribution of methylmorphine (commonly known as codeine), ethylmorphine (commonly known as dionin), and their respective salts. The object of the Regulations is to implement in respect of the aforesaid drugs the provisions of the Geneva Convention of 1931, which require that the existing control of the trade in dangerous drugs shall be extended to the wholesale trade in these drugs as from January 1st next. The draft Regulations do not affect the distribution of the drugs by persons other than wholesale druggists or possession of the drugs by any person in quantities of less than one pound avoirdupois. Copies may be obtained on application to the Under Secretary of State, Home Office, Whitehall, S.W.1.

The Home Secretary has appointed Mr. Daniel Patterson Blades, K.C., Sheriff of Forfarshire, to be Legal Assessor to the Medical and Dental Tribunals for Scotland constituted under the Dangerous Drugs (Consolidation) Regulations, 1928, in place of Mr. John Cowan, K.C., who has resigned.